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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

MCKENZIE, THOMAS

ART UNIT	PAPER NUMBER
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1776

NOTIFICATION DATE	DELIVERY MODE
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03/28/2011

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

mailroom@bskb.com

Office Action Summary

Application No.

10/583,999

Applicant(s)

SHIOMI ET AL.

Examiner

THOMAS MCKENZIE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 January 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) 2-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The objections to the specification are withdrawn in light of the present amendments.

Claim Objections

2. The objection to **claim 3** is withdrawn as it is cancelled.
3. Applicant's arguments with respect to **claims 1 and 7** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
6. **Claims 1 and 7** are rejected under 35 U.S.C. 103(a) as being unpatentable over Katsuda et al, US 2002/0017777 (Katsuda) in view of Jordan.
7. Regarding **claim 1**, Katsuda substantially teaches:

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8. A filter for a gas generator (figure 1, part 7, paragraphs 37 and 58), comprising a wound tubular metal material (figure 1, part 7; paragraphs 37 and 38) containing iron wires (paragraph 38), wherein intersecting parts of the metal wires are bonded ("wire mesh", paragraph 37).

9. Although Katsuda does not explicitly teach the iron wires contain a copper coating, Katsuda does teach the gas generator uses a non-azide gas generating agent as a propellant (paragraph 32).

10. In an analogous art of inflators, Jordan substantially teaches a wound, metal wire, gas-generator filter provided containing copper coated wires (column 4, lines 55-60). The thickness of the copper coating ranges from 0.0003-0.015 inches (7.62-381 microns) (column 5, lines 14-19) which substantially reads on 0.5-10 microns as claimed. Jordan teaches that the copper coating is necessary to prevent degradation of the components of the gas generator (i.e. the metal filter), when non-azide propellants are used (column 2, lines 35-45). It would have been obvious to one of ordinary skill in the art at the time of the invention to use such a copper coating with the wires of Katsuda in order to prevent degradation.

11. Please note that the limitations "formed by winding" and "bonded by affixing and solidifying of the molten copper" are not given weight since they are directed to the method of forming the apparatus rather than the structure of the apparatus. The cited prior art teaches all of the positively recited structure of the claimed apparatus or product. The determination of patentability is based upon the apparatus structure itself. The patentability of a product or apparatus does not depend on its method of production

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or formation. If the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process. See *In re Thorpe*, 777 F.2d 695, 698, 227 USPQ 964, 966 (Fed. Cir. 1985) (see MPEP § 2113).

12. Additionally, please note that the Examiner considers the intersecting parts of the metal wires in the metal mesh of Katsuda to be bonded to each other, as these metal meshes are known in the art to contain crisscrossed wires bonded at the crisscrossed intersections.

13. Regarding **claim 7**, Katsuda substantially teaches:

14. A gas generator for an air bag (paragraph 58), comprising:

15. a housing having a gas discharge port (figure 1, part 11; paragraph 59), an ignition means actuated by impact (figure 1, part 4; paragraph 62), a combustion chamber storing a gas generating agent that is ignited and burned by the ignition means to generate a combustion gas (figure 1, part 5; paragraph 62), and a filter for filtering and cooling a combustion gas, wherein the filter for a gas generator according to **claim 1** is used as a filter (figure 1, part 7; paragraph 58).

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US 7,578,522; 7,452,397; 7,172,214; 6,626,461; 6,123,359; 5,645,296; 5,547,638; 5,613,705.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to THOMAS MCKENZIE whose telephone number is (571)270-5327. The examiner can normally be reached on Monday-Thursday 7AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on 571-272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THOMAS MCKENZIE/
Examiner, Art Unit 1776

/Duane Smith/
Supervisory Patent Examiner, Art
Unit 1776

TBM